



Kingdom of Lesotho



**Statistical Report
NO 35 of 2015**

2014/2015 Agricultural Production Survey Crops



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Mission: To coordinate the National Statistical System(NSS) and produce accurate, timely and reliable culturally relevant and internationally comparable statistical data for evidence-based planning, decision making, research, policy, program formulation and monitoring and evaluation to satisfy the needs of users and producers.

Contents	Page
Table of Contents.....	i
List of Tables.....	iii
List of Figures.....	v
1.0 Introduction	1
2.0 Sample Design.....	1
3.0 Method of Data Collection.....	2
4.0 Household Characteristics.....	3
4.1 Agricultural Household Heads	3
4.2 Residential Status of Household Head	4
4.3 Household Members Contributing to Farming Activities	4
4.4 Main Activity	5
4.5 Management of Fields.....	6
4.6 Decision Making.....	6
4.7 Dependency Ratio.....	7
4.8 Educational Attainment.....	7
5.0 Summer Crops	9
5.1 Area Planted	9
5.2 Area Fallow.....	10
5.3 Area Harvested	10
5.4 Production.....	11
5.5 Yield	13
5.6 Crop Failure	15
5.6.1 Reasons for Crop Failure	16
6.0 Winter Crops	18
6.1 Area Planted and Area Harvested.....	18
6.2 Production.....	18
6.3 Yield	19
6.4 Crop Failure	20
7.0 Operations and Inputs.....	21
7.1 Actual and Market Amount on Operations and Storage	22

7.1.1 Actual and Market Amount Spent on Planting and Weeding	22
7.1.2 Actual and Market amount on Harvesting and Storage	22
7.2 Inputs.....	23
7.2.1 Pesticides	24
7.2.2 Seeds.....	25
7.3 Main purpose of planting.....	26
ANNEX TABLES.....	27

Contents

Page

List of Tables

Table 1: Percentage Distribution of Household Heads By Residential Status and Sex, 2014/2015 Agricultural Year.....	4
Table 2: Percentage Distribution of Household Members Contributing to Farming by District and Month, 2014/2015 Agricultural Year.....	5
Table 3: Total Number of Household Members by Main Activity and Zone, 2014/2015 Agricultural Year.....	5
Table 4: Farming Population Management by District and Sex, 2014/2015 Agricultural Year	6
Table 5: Responses made by Household Members on Who Makes Decision by Sex, 2014/2015 Agricultural Year.....	7
Table 6: Percentage Distribution of Household Members by Age Group and Educational Attainment, 2014/2015 Agricultural Year.....	8
Table 7: Area Planted (ha) to Five Major Crops by District, 2014/2015 Agricultural Year.....	9
Table 8: Area Fallow (ha) by District, 2010/2011 to 2014/2015 Agricultural Years.....	10
Table 9: Production (mt) for Five Major Crops by District, 2014/2015 Agricultural Year.....	12
Table 10: Yield (mt/ha) by Crop and District for Summer, 2014/2015 Agricultural Year.....	14
Table 11: Area Failed (ha) by District and Cause of Crop Failure in Summer, 2014/2015 Agricultural Year.....	17
Table 12: Area Planted (ha) and Area Harvested to Wheat and Peas, 2014/2015 Agricultural Year.....	18
Table 13: Wheat and Peas Production in Winter, 2014/2015 Agricultural Year.....	19
Table 14: Yield (mt/ha) by Crop and District in Winter, 2014/2015 Agricultural Year.....	19
Table 15: Area Failed by Crop and District, 2014/2015 Agricultural Year.....	20
Table 16: Total Area (ha) Ploughed, Disked, Planted, Weeded and Harvested by District for 2014/2015 Agricultural Year.....	21

Table 17: Total Actual and Market Costs Spent (Maloti) on Planting and Weeding by District, 2014/2015 Agricultural Year.....	22
Table 18: The Actual and Market Amount of Harvesting and Storage by District, 2014/2015 Agricultural Year.....	23
Table 19: Inorganic Fertilizers Used by Quantity (kg), Amount (Maloti) and Area (ha) 2014/2015 Agricultural Year	23
Table 20: Organic Fertilizers Used by Quantity (kg), Amount (Maloti) and Area (ha), 2014/2015 Agricultural Year	24
Table 21: Total Area (ha) Applied Pesticides by District and Type, 2014/2015 Agricultural Year	24
Table 22: Usage of Seeds (kg) by District and Seed Type, 2014/2015 Agricultural Year	25
Table 23: Total Seed Type Used by District, 2014/2015 Agricultural Year	26

Contents

Page

List of Figures

Figure 1: Percentage Distribution of Household Heads by District and sex, 2014/2015 Agricultural Year.....	3
Figure 2: Area Planted and Area Harvested (ha) by Crop for Summer, 2014/2015 Agricultural Year.....	11
Figure 3: Production (mt) of five Major Crops from 2010/2011 to 2014/2015 Agricultural Years.....	13
Figure 4: Yield (mt/ha) by Crop from 2010/2011 to 2014/2015 Agricultural Years.....	15
Figure 5: Area Failed by Crop, 2014/2015 Agricultural Year.....	16
Figure 6: Percentage Share of Households by Main Purpose of Crop Production, 2014/2015 Agricultural Year.....	26

1.0 Introduction

Agricultural Production Survey (APS) is an annual survey, which is undertaken by Agriculture and Food Security Statistics Division. APS runs from the 1st of August to 31st July of the following year and concentrates on the production of both livestock and crops in the rural parts of the country. The agricultural year has two seasons; winter and summer seasons. The summer season starts from August to January while winter is from February to July.

The 2014/2015 APS report has covered information on production and yield of the five major crops: Maize, Wheat, Sorghum, Beans and Peas as well as Area failed under each crop and reasons for crop failure. It also includes Household characteristics, Operations, Inputs and Costs of crop production.

2.0 Sample Design

Stratified multi-stage cluster sampling design was adopted for the selection of the sample of APS for 2014/2015 Agricultural Year. Two or three enumeration areas were combined to form a Primary Sampling Unit (PSU). A total of 120 PSU's were selected at the first stage in the rural areas of the country. A Probability Proportional to Size (PPS) was used for the selection of PSU's where number households were taken as a measure of size. Individual farming households constitute Secondary Sampling Units (SSU's) and systematic sampling technique was adopted for selection of SSU's. For the estimation of crop yield, ten fields for each of the main crops per PSU were selected following systematic sampling technique and these fields constitute third stage sample units. APS stratified farming households into households operating at least one field.

3.0 Method of Data Collection

All fields owned and operated by farming households either planted or fallow were measured. Fields which were not operated for more than three years were not considered. Each enumerator was responsible for one PSU. Data on yield was collected from two sampled sub-plots of 10 square meters each from selected fields.

Sub-plots were located using random numbers; the enumerators selected a random number to locate point 1 which is between 1 and the longest length of the field and the second random number; point 2 which is between 1 and the longest width of the field. For yield calculation, an average weight of grains from the two sub-plots was taken for each field and average yield of the PSU in each zone within the district was derived. In order to get Production, area harvested was multiplied by its crop yield. Additional Information was collected from the farming households through face to face interview.

Note:

Zeros in the report do not necessarily mean that there were no agricultural operations performed or inputs used, but the sampled households did not perform such activities.

4.0 Household Characteristics

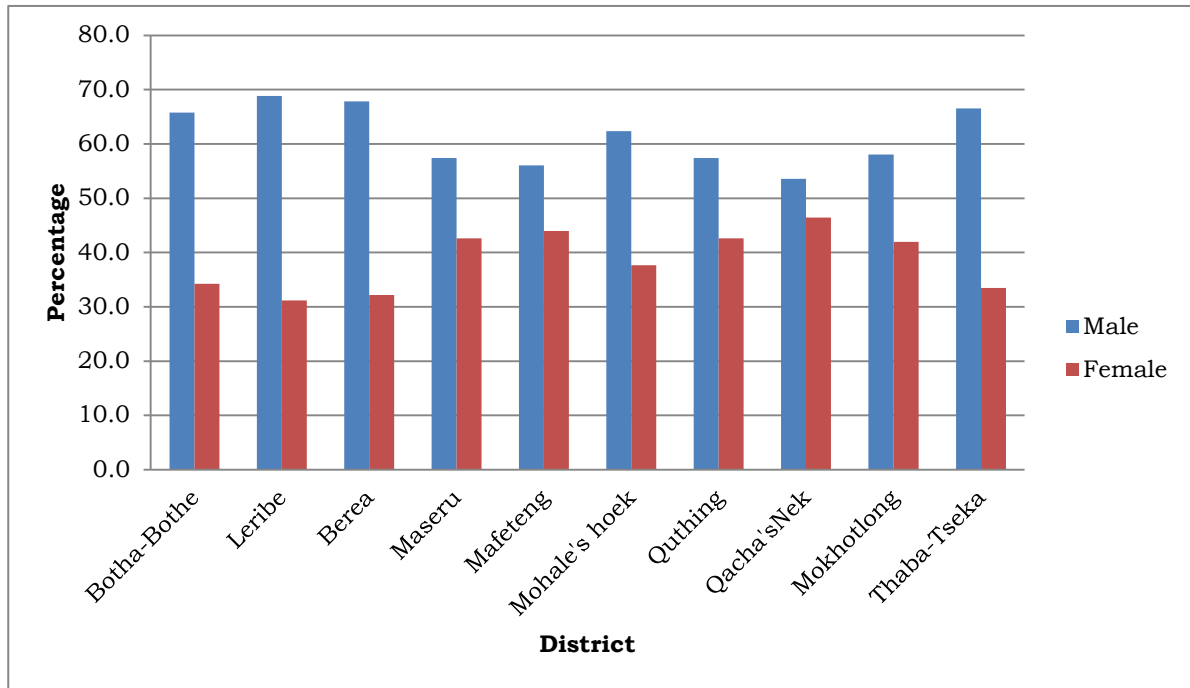
The section provides household characteristics of farming households in the rural areas of Lesotho during 2014/2015 Agricultural Year. Characteristics such as age, sex, education and residential status are discussed.

4.1 Agricultural Household Heads

A household head is a person who makes day to day decisions for the household and whose authority is acknowledged by other members.

Figure 1 depicts Percentage Distribution of Household Heads by District and Sex for the 2014/2015 Agricultural Year. The total number of household heads was estimated to be 170,458. In all districts, there were more male household heads than female heads. Leribe had the highest proportion of male heads with 68.8 percent followed by Berea with 67.8 percent. On the other hand, Qacha’s Nek had the highest proportion of female heads with 46.4 percent followed by Mafeteng with 44.0 percent.

Figure 1: Percentage Distribution of Household Heads by District and Sex, 2014/2015 Agricultural Year



4.5 Management of Fields

Management refers to daily overseeing of farming activities in a household. The management of farming activities is a vital role in the agricultural crop production, and can be done by members in the farming household. Table 4 indicates Farming Population Management by District and Sex during the 2014/2015 Agricultural Year. Out of 218 105 members who managed their fields, 57.3 percent were males. Among all the districts, Mophale's Hoek is observed to have more males and females who manage their fields with 28 486 males and 23 558 females. Further, Mokhotlong had few males farming household while Qacha's Nek had few females farming households with 1 365 and 1 456 respectively.

Table 4: Farming Population Management by District and Sex, 2014/2015 Agricultural Year

District	Sex	
	Male	Female
Botha-Bothe	5,694	3,159
Leribe	15,506	8,263
Berea	20,803	15,287
Maseru	15,346	11,422
Mafeteng	12,450	9,954
Mophale's Hoek	28,486	23,558
Quthing	5,590	4,290
Qacha's Nek	2,063	1,456
Mokhotlong	1,365	1,618
Thaba-Tseka	17,615	14,183
Lesotho	124,917	93,188

4.6 Decision Making

Decisions regarding activities that may be performed in the fields can be done by different members of the households. Table 5 indicates the total Number of Household Members' Responses on who Make Decision is indicated by table 5. The total number of farming household members' responses who made decision was 780 349. It is observed from the table that 385 581 responses of male heads made decisions. It is also observed that 110 male parents/parents in law to the household head responded that they made decisions on their fields.

Table 5: Responses made by Household Members on who Makes Decision by Sex, 2014/2015 Agricultural year

Members	sex	
	Male	Female
Head	385,581	375,867
Spouse	5,017	11,011
Child	1,406	422
Sibling	641	0
Parent/Parent in law	110	0
Other relative	209	0
Not related	87	0
Total	393,050	387,299

4.7 Dependency Ratio

Dependency ratio is the ratio of non active population aged 0-14 together with those aged 65 years and above to active population (those aged 15 to 64). During the 2014/2015 Agricultural Year, dependency ratio of households was 72, meaning that 100 active people were looking after 72 inactive people. The (total) dependency ratio can be decomposed into the child dependency ratio and the aged dependency ratio. Therefore it was found that child dependency ratio was 56 while aged dependency ratio was 15.

4.8 Educational Attainment

Table 6 shows the Percentage Distribution of Household members by Age Group and Educational Level for 2014/2015. It is observed from the table that most of members have attained Primary level while few members are Graduates. Majority of the members with 10 -14 years age group (92.8 percent) completed Primary level.

5.2 Area Fallow

Area Fallow refers to land not cultivated during the entire agricultural year. Table 8 illustrates Fallow Area for 2010/2011 to 2014/2015 Agricultural Years. From 2010/2011 to 2011/2012, an increase of 98.1 percent was observed. Fallow area decreased from 2011/2012 to 2012/2013 by 46.3 percent and further decreased by 7.2 percent from 2012/2013 to 2013/2014. In 2014/2015, it decreased by 31.8 percent.

Table 8: Area Fallow (ha) by District, 2010/2011 to 2014/2015 Agricultural Year

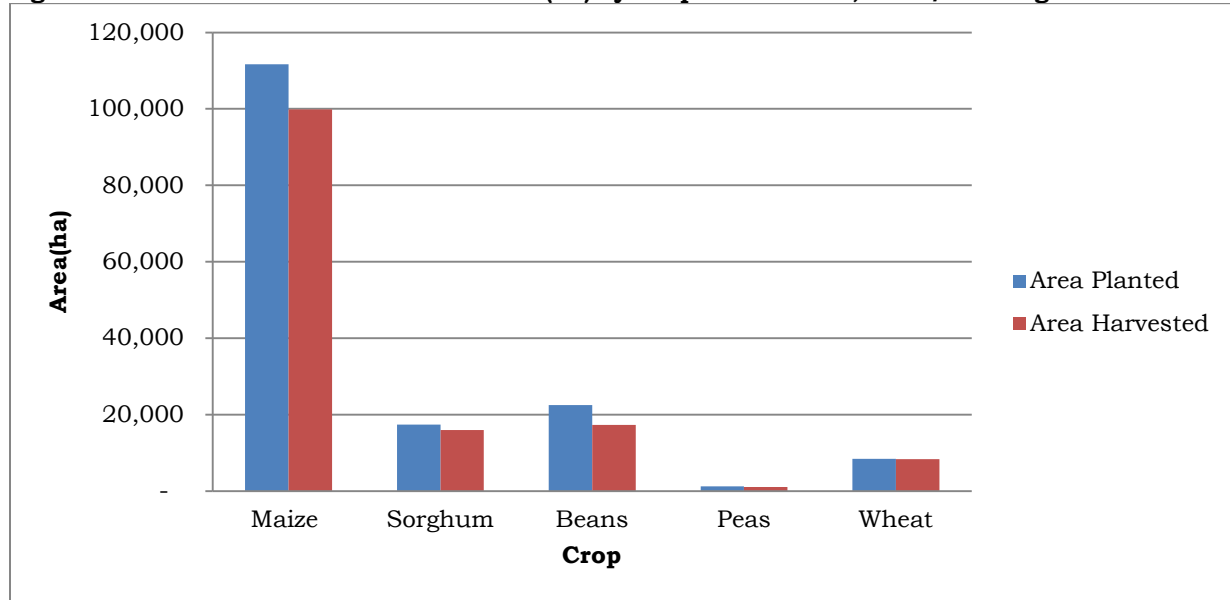
District	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Botha-Bothe	959	2,588	1,208	602	1,121
Leribe	7,351	27,682	16,671	9,724	6,038
Berea	15,396	19,063	12,052	11,352	8,060
Maseru	10,863	20,172	7,564	8,766	7,924
Mafeteng	17,156	29,444	19,486	18,060	12,638
Mohale's Hoek	9,105	19,793	7,191	8,154	4,321
Quthing	2,314	8,128	3,927	2,883	1,484
Qacha's Nek	1,805	4,452	1,921	1,947	1,627
Mokhotlong	2,261	3,634	2,800	3,614	1,511
Thaba-Tseka	2,014	2,187	813	3,229	1,881
Lesotho	69,224	137,143	73,632	68,329	46,605

5.3 Area Harvested

Crops are harvested after reaching their maturity stage. Area Harvested can be defined as the difference between Area Planted and Area Failed for each crop.

Figure 2 portrays Area Planted and Area Harvested (ha) by Crop for Summer, 2014/2015 Agricultural Year. Out of area planted to maize (111 640ha), 89.5 percent was harvested. Area planted to sorghum was 17 346ha while 92.1 percent of it was harvested. On the other hand, area planted to Wheat was 8 409ha and about 98.9 percent was harvested.

Figure 2: Area Planted and Area Harvested (ha) by Crop for Summer, 2014/2015 Agricultural Year



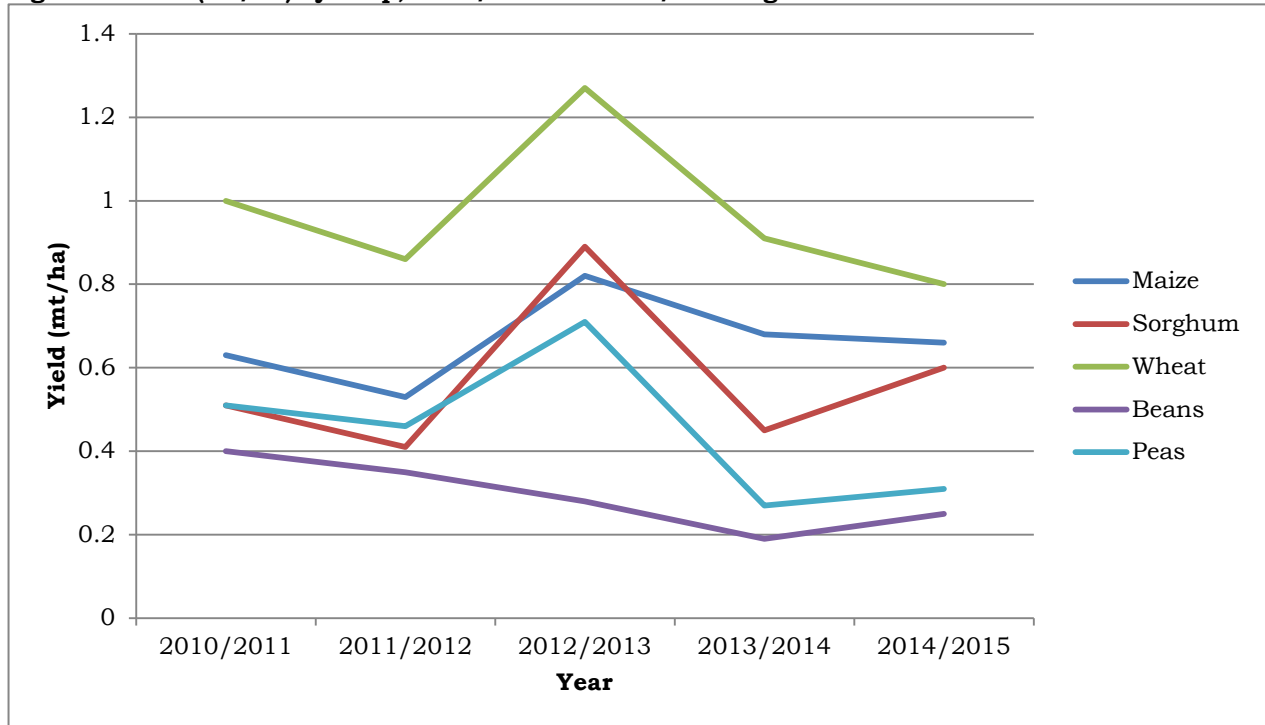
5.4 Production

Production is defined as the overall crop-output obtained from the harvested fields. Table 9 presents Production (mt) for Five Major Crops by District, 2014/2015 Agricultural Year. Maize production for 2014/2015 agricultural year was 65 636mt. The highest maize production was in Leribe with 18 849mt. Qacha's Nek was lowest with 396 mt.

Sorghum production was estimated at 9 529mt. Maseru had the highest production with 2 025mt followed by Mohale's Hoek with 1 998mt while Qach's Nek recorded the least (55mt).

Wheat production was 6 652mt in 2014/2015 agricultural year. Mokhotlong recorded the highest production with 2 511mt and the lowest was observed in Mafeteng (26mt).

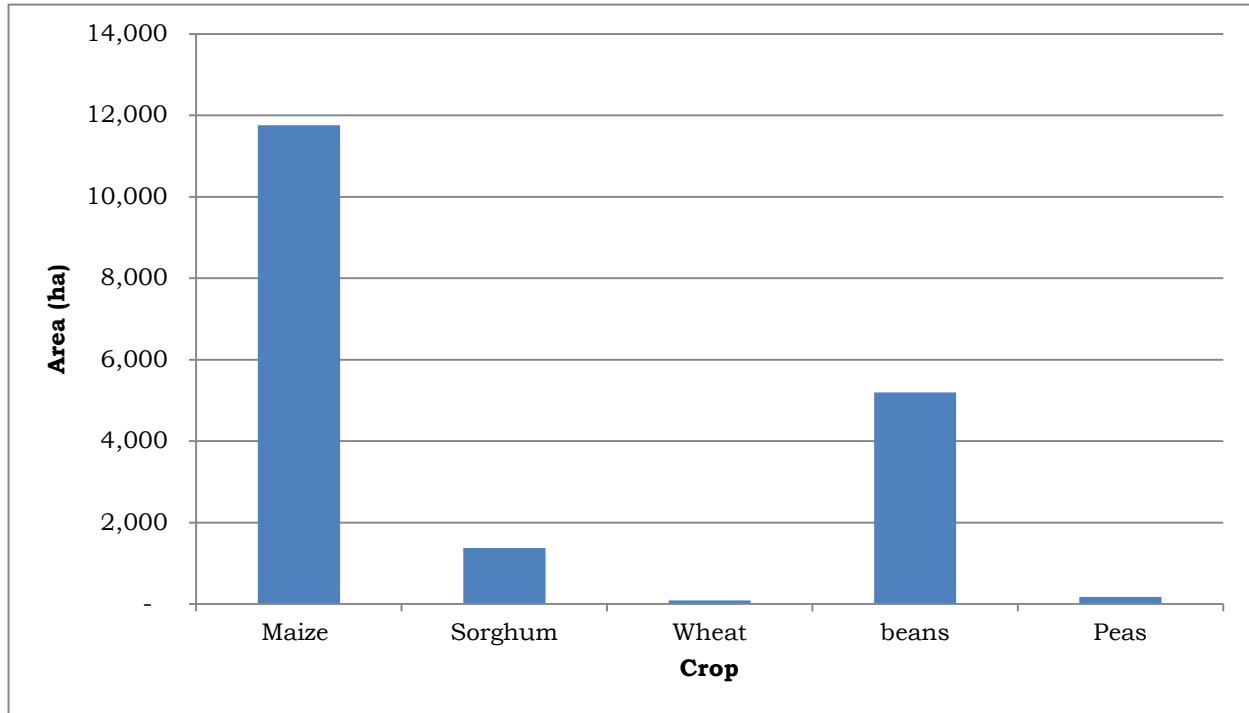
Figure 4: Yield (mt/ha) by Crop, 2010/2011 to 2014/2015 Agricultural Years



5.6 Crop Failure

Crop failure is a situation whereby a crop does not reach its maturity stage, or gets destroyed prior to the harvest period. It is measured by area that failed per crop. Figure 5 shows Area Failed by Crop, 2014/2015 Agricultural Year. From the graph, it is observed that maize had the largest area failed of 11 756ha followed by beans with 5 193ha. Furthermore, about 89ha of area planted to wheat failed.

Figure 5 : Area Failed by Crop, 2014/2015 Agricultural Year



5.6.1 Reasons for Crop Failure

The main reasons for crop failure are early frost, hail, flood, drought, pests, weeds, animals, late planting and other. The category “other” comprises reasons such as leaching, poor planting methods and pre harvest losses amongst other things .

Table 11 shows Area Failed (ha) by District and Cause of Crop Failure in Summer, 2014/2015 Agricultural Year. It can be observed from the table that the largest area that failed was due to Drought (11 739 ha) and the most affected district was Mafeteng with 3 739ha. The least area that failed was due to Floods with 47ha.

Table 11: Area Failed(ha) by District and Cause of Crop Failure in Summer, 2014/2015 Agricultural Year

District	Early Frost	Hail	Flood	Drought	Pests	Weeds	Animals	Late Planting	Other
Botha-Bothe	25	12.6	0	616	0	32	9	387	0
Leribe	0	0.0	0	249	20	144	82	874	153
Berea	18	0.0	0	1,926	12	194	289	1,190	231
Maseru	0	0.0	0	3,397	0	0	0	530	78
Mafeteng	0	136	0	3,739	0	251	17	121	0
Mohale's Hoek	810	131	0	549	76	279	61	1,361	87
Quthing	76	0.0	0	891	0	0	43	98	0
Qacha's Nek	0	0.0	0	155	22	0	47	4	13
Mokhotlong	0	0.0	0	71	0	0	0	0	0
Thaba-Tseka	861	0.0	47	146	0	168	13	427	63
Lesotho	1,791	280	47	11,739	130	1,068	560	4,993	625

6.0 Winter Crops

Winter season crops are crops that are planted between 1st February and 31st July of the following year. This section covers information on area planted, area harvested, production as well as yield to wheat and peas.

6.1 Area Planted and Area Harvested

Table 12 portrays Area Planted (ha) and Area Harvested to Wheat and Peas, 2014/2015 Agricultural Year. Area planted to wheat was 583ha, showing an increase of 1.6 percent from the previous year which was 574ha. Area harvested to wheat also increased by 122.5 percent from 262ha of the previous year to 583ha of the current year. Area planted to peas was 421ha; it decreased by 55.9 percent from 955ha in 2013/2014. Area harvested to peas decreased by 47.8 percent from 502ha in 2013/2014 to 262ha in 2014/2015.

Table 12: Area Planted (ha) and Area Harvested to Wheat and Peas, 2014/2015 Agricultural Year

District	Wheat		Peas	
	Area Planted	Area Harvested	Area Planted	Area Harvested
Botha- Bothe	0	0	18	18
Leribe	293	293	18	18
Berea	0	0	47	47
Maseru	0	0	91	91
Mafeteng	290	290	136	71
Mohale's Hoek	0	0	111	17
Quthing	0	0	0	0
Qacha's Nek	0	0	0	0
Mokhotlong	0	0	0	0
Thaba-Tseka	0	0	0	0
Lesotho	583	583	421	262

6.2 Production

Table 13 illustrates Wheat and Peas Production by District in Winter, 2014/2015 Agricultural Year. Wheat production was 417mt and had increased by 129.1 percent compared to 2013/2014 production (182mt). Wheat production for Mafeteng and Leribe was estimated at 226mt and 191mt respectively.

Production of Peas was 146mt, showing a decrease of 23.6 percent in 2013/2014 (191mt). The highest production was recorded in Maseru (57mt), while Mohale's Hoek was lowest with 5mt.

6.4 Crop Failure

Table 15 illustrates Area Failed by Crop and District, 2014/2015 Agricultural Year. There was no crop failure for Wheat in Leribe and Mafeteng for the 2014/2015 agricultural year.

During this season, 159ha of area planted to peas had failed, showing an increase of 278.6 percent from 42ha in 2013/2014. Area that failed in Mohale’s Hoek was 94ha and Mafeteng 65ha.

Table 15: Area Failed by Crop and District, 2014/2015 Agricultural Year

District	Wheat	Peas
Botha-Bothe	-	0
Leribe	0	0
Berea	-	0
Maseru	-	0
Mafeteng	0	65
Mohale's Hoek	-	94
Quthing	-	0
Qacha's Nek	-	0
Mokhotlong	-	0
Thaba-Tseka	-	0
Lesotho	0	159

7.0 Operations and Inputs

This section covers information on operation of fields, types of input used and the cost incurred during crop production being the actual cost and market cost. The area where operations were performed and inputs used together with their quantities are also covered. Generally, information gives a summary of all the expenses incurred from ploughing to where the farmer harvests and stores the production.

Table 16 presents Area Ploughed, Disked, Planted and Weeded by District, 2014/2015 Agricultural Year. Out of 182 967ha ploughed, 74 571ha was disked and 166 626 ha planted while 131 415ha was weeded.

Leribe and Maseru had the largest area ploughed, 33 994ha and 33 063ha respectively followed by Mafeteng with 25 462 ha. Maseru dominated in area disked (23 238ha) followed by Berea with 15 369ha.

Table 16: Total Area (ha) Ploughed, Disked, Planted, Weeded and Harvested by District for Agricultural Year 2014/2015

District	Ploughed	Disked	Planted	Weeded
Botha-Bothe	7,087	2,558	6,861	6,904
Leribe	33,994	8,134	25,461	22,423
Berea	20,860	15,369	21,105	15,111
Maseru	33,063	23,238	30,776	20,790
Mafeteng	25,462	395	24,348	21,330
Mohale's Hoek	17,422	7,763	16,557	14,620
Quthing	9,351	276	8,695	7,564
Qachas' Nek	5,668	985	4,462	3,465
Mokhotlong	13,536	5,481	12,523	8,776
Thaba-Tseka	16,525	10,373	15,839	10,431
Lesotho	182,967	74,571	166,626	131,415

Table VIII: Area Harvested in Winter by District, Zone and Crop Type for 2014/2015 Agricultural Year

	Zone	Wheat	Peas
Botha-Bothe	LowLands	0	18
	FootHills	0	0
	Mountains	0	0
	Total	0	18
Leribe	LowLands	293	18
	FootHills	0	0
	Mountains	0	0
	Total	293	18
Berea	LowLands	0	47
	FootHills	0	0
	Total	0	47
Maseru	LowLands	0	91
	FootHills	0	0
	Mountains	0	0
	Total	0	91
Mafeteng	LowLands	290	71
	FootHills	0	0
	Total	290	71
Mohale's Hoek	LowLands	0	9
	FootHills	0	7
	Mountains	0	0
	SRV	0	0
	Total	0	17
Quthing	Mountains	0	0
	SRV	0	0
	Total	0	0
Qacha's Nek	Mountains	0	0
	SRV	0	0
	Total	0	0
Mokhotlong	Mountains	0	0
	Total	0	0
Thaba-Tseka	Mountains	0	0
	SRV	0	0
	Total	0	0
Lesotho		583	262

Table X: Winter Production by District, Zone and Crop Type for 2014/2015 Agricultural Year

District	Zone	Wheat	Peas
Botha-Bothe	LowLands	0	8
	FootHills	0	0
	Mountains	0	0
	Total	0	8
Leribe	LowLands	191	9
	FootHills	0	0
	Mountains	0	0
	Total	191	9
Berea	LowLands	0	31
	FootHills	0	0
	Total	0	31
Maseru	LowLands	0	57
	FootHills	0	0
	Mountains	0	0
	Total	0	57
Mafeteng	LowLands	226	36
	FootHills	0	0
	Total	226	36
Mohale's Hoek	LowLands	0	4
	FootHills	0	1
	Mountains	0	0
	SRV	0	0
	Total	0	5
Quthing	Mountains	0	0
	SRV	0	0
	Total	0	0
Qacha's Nek	Maountains	0	0
	SRV	0	0
	Total	0	0
Mokhotlong	Mountains	0	0
Thaba-Tseka	Total	0	0
	Mountains	0	0
	SRV	0	0
Total	0	0	
Lesotho		417	146

Table XIV: Area Failed in winter by District, Zone and Crop Type for 2014/2015 Agricultural Year

District	Zone	Wheat	Peas
Botha-Bothe	LowLands	0	0
	FootHills	0	0
	Mountains	0	0
	Total	0	0
Leribe	LowLands	0	0
	FootHills	0	0
	Mountains	0	0
	Total	0	0
Berea	LowLands	0	0
	FootHills	0	0
	Total	0	0
Maseru	LowLands	0	0
	FootHills	0	0
	Mountains	0	0
	Total	0	0
Mafeteng	LowLands	0	65
	FootHills	0	0
	Total	0	65
Mohale's Hoek	LowLands	0	94
	FootHills	0	0
	Mountains	0	0
	SRV	0	0
	Total	0	94
Quthing	Mountains	0	0
	SRV	0	0
	Total	0	0
Qacha's Nek	Mountains	0	0
	SRV	0	0
	Total	0	0
Mokhotlong	Mountains	0	0
	Total	0	0
Thaba-Tseka	Mountains	0	0
	SRV	0	0
	Total	0	0
Lesotho		0	159

